NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD AND SPECIFICATIONS

CROSS WIND RIDGES

(Feet)
CODE 589A

DEFINITION

Ridges formed by tillage or planting and aligned across the prevailing wind erosion direction.

PURPOSES

This practice may be applied as part of a conservation management system to reduce soil erosion from wind.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to cropland or other land where crops are grown.

It is best adapted to soils which are stable enough to sustain effective ridges such as clayey, silty, and sandy loam soils.

It is not well adapted on unstable soils such as sands, loamy sands, and certain organic soils.

CRITERIA

Ridge height, spacing, and direction:

Acceptable combinations of ridge height, spacing, and direction are those having a Ridge Roughness K value equal to 0.8 or less during those periods when wind erosion is expected to occur. These K values are found in Section I-(iv)-B-1 in the Field Office Technical Guide.

CONSIDERATIONS

Transport of wind-borne sediment and sediment-borne contaminants offsite can be reduced by this practice when used in a conservation management system.

Use this standard in combination with other applicable conservation treatments. Where water erosion along the furrows formed by the cross wind ridges is a concern, the hazard can be reduced by farming across the slope according to the CONTOUR FARMING (330) conservation practice standard

PLANS AND SPECIFICATIONS

Site specification for establishment and maintenance of this practice shall be prepared for each field or treatment unit according to the Criteria, Considerations, and Operation and Maintenance described in this standard.

Site specifications shall be recorded using approved specification sheets, job sheets, narrative statements in the conservation plan, or other acceptable documentation.

OPERATION AND MAINTENANCE

Ridges shall be established or reestablished by normal tillage and planting equipment such as chisel plows, drills with hoe openers, or other similar implements which form effective ridges. Ridge establishment shall occur prior to the season when wind erosion is expected to occur.

After establishment, ridges shall be maintained through those periods when wind erosion is expected to occur or until growing crops provide enough cover to protect the soil from wind erosion.

If ridges deteriorate and become ineffective due to weathering or erosion, ridges shall be re-established unless doing so would damage a growing crop.